



Figure 8-figure supplement 1. Reduction of mitochondrial fission does not alleviate the neurodegeneration in *sel-12(ty11)* animals. (A) Quantification of ALM neuronal mitochondrial morphology in *sel-12(ty11)* animals grown on EV and *drp-1* RNAi. Analysis was done using transgenic animals expressing mito::GFP in mechanosensory neurons (*jsIs609*). (B) Quantification of mitochondrial Ca^{2+} using animals expressing mito::GCaMP6 and mCherry in their mechanosensory neurons (*takEx415*). (C) Basal and (D) maximal respiration rates of *sel-12* mutant animals grown on EV and *drp-1* RNAi. (E) Quantification of aberrant structures (sprouts/branches) on ALM neuronal soma of *sel-12(ty11)* animals grown on EV and *drp-1* RNAi. (F) Response of day 1 *sel-12(ty11)* animals grown on EV and *drp-1* RNAi to light touch. n = number of animals analyzed per genotype. Data are displayed as mean \pm SEM, and all comparisons have been made to wild type animals unless otherwise indicated. ns $P > 0.05$, ** $P < 0.001$ (two-tailed T-test).